

PAT-NO: JP361096136A
DOCUMENT-IDENTIFIER: JP 61096136 A
TITLE: INTERNAL-COMBUSTION ENGINE WITH SUPERCHARGER
PUBN-DATE: May 14, 1986

INVENTOR-INFORMATION:

| NAME | COUNTRY |
|---------------------|----------------|
| NAKAMURA, KENICHI | |
| KUBOTA, OSAMU | |
| TSUNODA, TADASHI | |
| MIYAZAWA, SHINKICHI | |

ASSIGNEE-INFORMATION:

| NAME | COUNTRY |
|--------------------|----------------|
| HONDA MOTOR CO LTD | N/A |

APPL-NO: JP59216973

APPL-DATE: October 16, 1984

INT-CL (IPC): F02B033/30 , F02B033/20

ABSTRACT:

PURPOSE: To hold down draft resistance in a suction passage to the lowest possible extent as well as to make a response characteristic keepable so good, by setting an effective opening area ratio of each reed valve to be installed in both suction and discharge ports of a displacement type supercharger, within the specified range.

CONSTITUTION: In a supercharged internal-combustion engine for a motorcycle, a supercharger 11 is installed on top of a crankcase 3, and this supercharger 11 is made up of installing a subpiston 13 to be reciprocated by a crankshaft 16 via connecting rod 15 fitly inside a subcylinder 12. A plate 18 is attached to an outer end part of the subcylinder 12, and reed valves 19 and 20 at both suction and discharge sides are solidly installed in this plate 18. In this case, when an effective opening area of each of these reed valves 19 and 20 is set down to S_{in} and S_{out} , these ratios S_{out}/S_{in} should be set to the range of more than 1/4 but less than 1/2. With this constitution, draft resistance in a suction passage is held down to low, and supercharging efficiency in the supercharger 11 is heightened over the wide speed range.

COPYRIGHT: (C)1986,JPO&Japio

